

YEAR OF CLEAN WATER

Water Education Weekly Drops

Week Three Watersheds

What does our Watershed Program do?

Because watersheds are defined by natural hydrology, they represent the most logical basis for managing water resources. The resource becomes the focal point, and managers are able to gain a more complete understanding of overall conditions in an area and the stressors which affect those conditions.

Traditionally, water quality improvements have focused on specific sources of pollution, such as sewage discharges, or specific water resources, such as a river segment or wetland. While this approach may be successful in addressing specific problems, it often fails to address the more subtle and chronic problems that contribute to a watershed's decline. For example, pollution from a sewage treatment plant might be reduced significantly after a new technology is installed, and yet the local river may still suffer if other factors in the watershed, such as habitat destruction or polluted runoff, go unaddressed. Watershed management can offer a stronger foundation for uncovering the many stressors that affect a watershed. The result is better equipped management to determine what actions are needed to protect or restore the resource.

- 1. What is a watershed?
- 2. How does water cycle through the water shed?
- 3. What is the name of the watershed that most Region III employees reside?

- 4. How many watersheds are in Philadelphia?
- 5. Can you name them all and their locations?

1. What is a watershed? (remember from Week Two)

A. A watershed is the area of land that drains into a specific water body. The watershed of a stream is all of the land that sheds water into the stream when it rains. When rain falls on land, it drains or runs off the nearest stream or river that is downhill. Water is a universal solvent, affected by all that it comes in contact with: the land it traverses, and the soils through which it travels. The important thing about watersheds is: what we do on the land affects water quality for all communities living downstream.

2. How does water cycle through the water shed?

A. Only 30-40 percent of the rain or snow that hits the ground goes directly to streams. Most of it, surprisingly, is taken up and used internally by plants. Some water penetrates soils and moves below as groundwater, feeding forests and replenishing aquifers. After infiltrating natural systems, water evaporates from rivers and wetlands, soils and plants. It returns to the atmosphere to fall again as precipitation. Water cycling cools the planet, cleans the air, and sustains life as we know it.

3. What is the name of the watershed that most Region III employees reside?

A. The Delaware Watershed.

4. How many watersheds are in Philadelphia?

A. 8

5. Can you name them all and their locations?

- Wissahickon Creek Watershed:
 Roxbourough, Chestnut Hill, West Germantown, Manayunk, West Mt Airy
- Schuykill River Underground Streams Watershed: University of PA, the Airport, South Philly west of Broad Street

- Tacony/Frankford Creek Watershed:
 East Germantown, Tacony, Oak Lane, Olney
- Poquessing Creek Watershed: Academy Rd., Woodhaven Rd, NE Philly Airport
- Cobbs Creek Watershed: Cobbs Creek Water
- Old Frankford Creek Watershed: Frankford
- DE River Underground Streams Watersheds: South Philly east of Broad Street, Center City, or North Philly east of Broad, Bridesburg, Port Richmond or Kensington
- Rhawnhurst, Fox Chase or Bustleton: Pennypack Creek Watershed

For more information: http://www.watershedatlas.org
http://www.epa.gov/OWOW/watershed/
or call Bernie Sarnoski at (215) 814-575